

REMARKS

The allowance of claims 22 to 28 and the approval of the proposed drawing change filed August 28, 2001 are noted with appreciation.

Independent claims 11 and 17 have been amended better to distinguish applicants' invention patentably from the prior art. More particularly, those claims now specify that the lenticular lens sheet is used for a rear protection screen that displays an image projected by an image light source including three cathode-ray tubes. The specification supports the changes to the claims; see particularly the discussion at page 1, lines 9 to 20. See also the discussion at page 2, lines 7 to 28 about the problems with contrast (stray light ray generation) when using a system having three cathode-ray tubes. The present invention overcomes those problems.

As noted, the particular lens sheet of the non-allowed claims is now specifically stated to be used for a rear projection screen displaying an image projected by an image light source including three cathode-ray tubes. The particular lens sheet has an arrangement similar to that of the so-called double-sided black

stripes lenticular lens sheet (both instant Fig. 6 and Yoshimura et al. '031, of record, show this conventional arrangement) and includes specifically an entrance lens part that forms the entrance surface and has an array of a plurality of convex lens elements; an exit lens part that forms the exit surface and has an array of a plurality of convex lens elements; and a light absorbing layer in the exit surface. The entrance lens part of the lenticular lens sheet has a tinted layer that covers at least a portion thereof near the entrance surface of the lenticular lens sheet; the prior art lenticular lens sheets do not have this tinted layer.

In the present invention, the lenticular lens sheet having an arrangement similar to that of the prior art double-sided black stripes lenticular lens sheet is used for a rear projection screen that displays an image projected by an image light source including three cathode-ray tubes and the entrance lens part of the lenticular lens sheet is provided with a tinted layer that covers at least a portion thereof near the entrance surface of the lenticular lens sheet.

Using the lenticular lens sheet of the presently amended claims, even in those cases where image light rays, which are

Serial No. 09/939,648

emitted from the three cathode-ray tubes with different angles of convergence, fall obliquely on the lenticular lens sheet, it is possible effectively to suppress generation of stray light rays in the lenticular lens sheet while enhancing the contrast in images displayed on that sheet. Such a property is not taught or suggested in the cited art.

The rejection of claims 11, 16, 17, 20 and 21 under 35 USC 103 as unpatentable over Yoshimura et al. '031 in view of Masahiro EP '460 is respectfully traversed.

The Examiner acknowledges that the primary reference shows a lenticular lens sheet having black stripes, but does not teach or suggest the use of a tinted layer formed on at least a portion of the entrance lens part. The secondary reference is cited to show it is known to use a tinted layer in a type of lenticular lens sheet and the Examiner concludes that it would have been obvious to combine and thus provide fine contrast in a display. Applicants have pointed out previously during the course of prosecution that it would not have been apparent to a person of ordinary skill in the art to combine the teachings of the primary and secondary references because the primary reference is directed to a double-

Serial No. 09/939,648

sided black stripes lenticular lens sheet while the secondary reference is directed to a single-sided lenticular lens sheet; the Examiner is directed to the arguments presented, for example, in the Amendment filed February 6, 2003 and the Amendment Under 37 CFR 1.116 filed December 16, 2002. Due to the matter of the lenticular lens sheet of the primary reference, the person of ordinary skill in the art would not be motivated to provide a tinted layer in at least a position of the entrance lens part near the entrance surface of the lenticular lens sheet.

In addition, it is respectfully submitted that a reading of portions of Masahiro EP '460 clearly indicates that the invention disclosed therein is a lenticular lens sheet of the single-sided type that is to be used in combination with a single tube type image light source such as a LCD or DMD; see the discussion in the reference at page 2, lines 3 to 5 and 17 to 48. No problem of stray light rays exists when using a lenticular lens sheet of the single-sided type because the stray light ray problem is particular to a lenticular lens sheet of the double-side black stripes type, which is used in combination with an image light source including three cathode-ray tubes. Accordingly, it is respectfully submitted

Serial No. 09/939,648

that there is no proper reason to combine the teachings. The primary reference describes a double sided black stripes lenticular lens sheet with no tinted layer in an entrance lens part. The secondary reference describes a single sided lenticular lens sheet having a tinted layer in an entrance lens part when the lens sheet is to be used with single image displays such as an LCD; there is no mention of use with a three cathode-ray tube arrangement.

Applicants also respectfully point out that the primary objective of Masahiro EP '460 is to prevent the occurrence of moire and evidently excludes the arrangement of a double-sided black stripes lenticular lens due to manufacturing reasons; see the discussion in the secondary reference at page 2, lines 28 to 36.

Applicants once more respectfully submit that it is not common sense in the art that the double-sided black stripes lenticular lens sheet of Yoshimura et al. '031 would require any further means to reduce external light as discussed in the instant specification at page 9, lines 16 to 24. The matter was also discussed in the Amendment Under 37 CFR 1.116 filed December 16, 2002.

The Examiner asserts in the Response to Arguments section on page 7 of the Office Action that while the primary references does

Serial No. 09/939,648

not teach the double-sided lenticular lens sheet described therein would reduce negative effects of external light striking the viewer's side screen, "as indicated by your application and U.S. Patent No. 6,241,181, double sided lenticular lens screens still have a problem with light striking the viewer's side screen." Applicants again respectfully submit that the disclosure relied upon is not part of the prior art; those comments are part of the recognition by applicants of the problem solved by the present invention and it is incorrect to rely upon such a holding in justification of the rejection, which should be withdrawn.

The rejection of claim 14 under 35 U.S.C. 103 as unpatentable over Yoshimura et al. '031 and Masahiro EP '460 further in view of Ludwig, Jr. et al. '205 and the rejection of claim 19 under 35 U.S.C. 103 as unpatentable over Yoshimura et al. '031 and Masahiro EP '460 further in view of Ananian '090 are respectfully traversed. The tertiary references are cited merely to show features of tinted layers and contain no disclosure that would overcome the deficiencies of Yoshimura et al. '031 and Masahiro EP '460 discussed above. The rejections should be withdrawn as well.

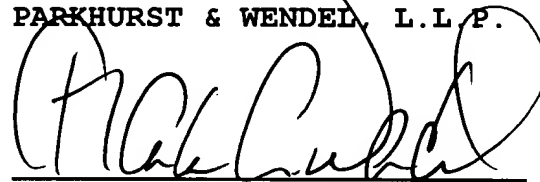
Serial No. 09/939,648

In view of the foregoing revisions and remarks, it is respectfully submitted that all pending claims are allowable and the USPTO paper to those ends is earnestly solicited.

The Examiner is requested to telephone the undersigned if additional changes are required in the case prior to allowance.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.



Charles A. Wendel

Registration No. 24,453

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Date

CAW/mhs

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PARKHURST & WENDEL, L.L.P.  
1421 Prince Street, Suite 210  
Alexandria, Virginia 22314-2805  
Telephone: (703) 739-0220